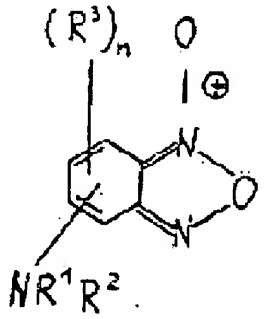
Claims

1. A method for detecting an analyte by a redox reaction and a fluorimetric determination, comprising contacting a sample containing the analyte with a detection reagent which contains a compound of the general formula (I) as a fluorimetric redox indicator:



(I)

wherein R^1 and R^2 are each independently selected from R, $(CH_2CH_2O)_mR$, COR, COOR and OCOR,

R^3 in each case is independently selected from NO_2, CN, R, OR, OCOR, COOR, SR and halogen,

R is H or C_1-C_4 alkyl, where alkyl is optionally substituted with halogen, OR, SR, NR_2, COOR, $CONR_2$, SO_3R and salts thereof or/and $PO(OR)_3$ and salts thereof,

m is an integer from 1-20 and

n is 1, 2 or 3.

2. The method of claim 1, wherein R^1 and R^2 are a C_1-C_2 alkyl group substituted with OH.

3. The method of claim 1, wherein R^3 is NO_2.

4. The method of claim 1, wherein the redox indicator (I) can directly accept electrons.

5. The method of claim 1, wherein the redox indicator (I) can accept electrons via a mediator.

6. The method of claim 5, wherein an oxidizable substance is detected as the analyte.

7. The method of claim 6, wherein the detection reagent further comprises one or more enzymes for reducing or oxidizing the analyte and optionally a coenzyme.

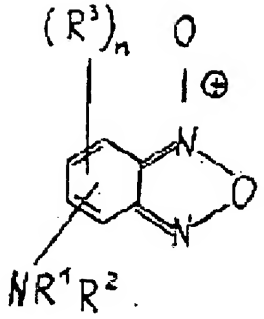
8. The method of claim 6, wherein glucose, lactate, alcohol, galactose, cholesterol, fructose, glycerol, pyruvate, creatinine, alanine, phenylalanine, leucine, triglycerides or HDL cholesterol are detected as analytes.

9. The method of claim 6, wherein glucose is detected using glucose oxidase, glucose dye oxidoreductase or glucose dehydrogenase/diaphorase.

10. The method of claim 5, wherein an enzyme catalysing a redox reaction or an enzyme whose reaction can be coupled to an oxidoreductase reaction is detected as the analyte.

11. The method of claim 10, wherein glutamate-oxalacetate transaminase (GOT), (AST), glutamate-pyruvate transaminase (GPT), alanine aminotransferase (ALT), lactate dehydrogenase (LDH) or creatine kinase (CK) are detected as analytes.

12. A reagent for detecting an analyte by a redox reaction and a fluorimetric determination, comprising a compound of the general formula (I):



(I)

wherein R^1 and R^2 are each independently selected from R, $(CH_2CH_2O)_mR$, COR, COOR and OCOR,

R^3 in each case is independently selected from NO_2, CN, R, OR, OCOR, COOR, SR and halogen,

R is H or C_1-C_4 alkyl, where alkyl is optionally substituted with halogen, OR, SR, NR_2, COOR, $CONR_2$, SO_3R and salts thereof or/and $PO(OR)_3$ and salts thereof,

m is an integer from 1-20, and

n is 1, 2 or 3.

13. The reagent of claim 12, further comprising components selected from enzymes, coenzymes, auxiliary substances, buffers and mediators.